

ABSTRACT OF THE DISCLOSURE

A connecting structure for exhaust pipes wherein a first connecting flange is connected to peripheries of downstream-end portions of a plurality of upstream exhaust pipes, a second connecting flange is connected to peripheries of upstream-end portions of a plurality of downstream exhaust pipes, and a plurality of spherical joints is provided between the two connecting flanges. Additionally, each of the spherical joints includes an annular seal unit adapted to be held in place between the first and second connecting flanges, a spherical bearing surface formed on one of the connecting flanges, and a flat bearing surface on the other one of the connecting flanges. Each annular seal unit including a spherical portion on one side, and a flat portion on an opposite side. The spherical bearing surfaces on the one connecting flange are in slidable spherical contact with respective spherical portions formed on the annular seal units. Further, both the connecting flanges are made integral over the plurality of spherical joints. The flat bearing surfaces of the other connecting flange confront respective annular seal units so that the flat sides of the annular seal units are brought into contact with the flat bearing surfaces so that the annular seal units can slide thereover in a direction substantially normal to longitudinal axes of exhaust pipes.